

Abstract of the Disclosure

The invention provides a temperature sensor on the basis of a thermocouple constituted by two different metals. The first metal is provided in the form of an electrically insulated wire, having a blank uninsulated portion. The second metal is constituted by a jacket member enclosing the insulated wire. The jacket member is in electrical contact with the insulated wire via the blank uninsulated portion to thereby form a measuring junction. As a feed line, an electrically insulated copper wire is provided whose free end has a blank portion. The first wire is wound around the copper wire and projects over the free end thereof. The jacket member extends over the blank uninsulated portion of the carrier wire and is in electrical contact therewith. Due to the fact that the same material is chosen for the jacket member and for the carrier wire, i.e. copper, the carrier wire can be used as electrical feed line. The coaxial jacket member is provided, at least in the region of the measuring junction, with a reflective coating.